

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. An apparatus for the extraction of organic compounds comprising:

a container having a top and a bottom and side walls, the top having an opening with a first connector having an upflow and downflow side affixed;

5 a sampling container inserted inside said container having an opening on one end with a third connector in contact with the first connector of the container allowing organic compounds to flow from the opening in the sampling container through the opening in the top.

2. An apparatus for the extraction of organic compounds as recited in claim 1 wherein said container is a pressure vessel with the sidewalls having an opening with a second connector having an up flow and down flow side affixed and wherein said top is removably attached to said sidewalls creating a pressurized chamber in said container.

3. An apparatus for the extraction of organic compounds as recited in claim 2 wherein said sampling container is a bag having a wide mouth opening with a cap on the end opposite said third connector, with eyelets affixed allowing said bag to be placed on a rack.

4. An apparatus for the extraction of organic compounds as recited in claim 3 wherein said container further comprises a filter attached to said top by a fourth connector in contact with said downflow side of said first connector allowing fluid flow between said container and said filter.

5. An apparatus for the extraction of organic compounds as recited in claim 4 wherein said filter comprises:

a glass screen positioned between a first and second stainless steel mesh, creating a sandwich arrangement;

5 first and second Teflon blocks encasing said sandwich arrangement, and each of said first and second Teflon blocks having centered bore holes allowing fluid flow through said first and second Teflon blocks.

6. An apparatus for the extraction of organic compounds as recited in claim 1 wherein said container is constructed of stainless steel.

7. An apparatus for the extraction of organic compounds as recited in claim 1 wherein said bag is comprised of tedlar and wherein said cap has a threaded connection to said bag.

8. The apparatus as recited in claim 1 wherein said container is constructed of stainless steel.

9. The apparatus as recited in claim 8 wherein said container has an opening at the bottom with a piston inserted allowing manual operation of said piston from outside said container.

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10. The apparatus as recited in claim 9 wherein said sampling container is a Teflon bottle.

11. The apparatus as recited in claim 10 wherein said Teflon bottle has a wide mouth opening with a lid having a fifth connector in contact with the upflow side of said first connector allowing organic compounds to flow from said Teflon bottle through said top.

12. The apparatus as recited in claim 11 wherein said container further comprises a filter attached to said top by a fourth connector in contact with said downflow side of said first connector allowing fluid flow between said container and said filter.

13. The apparatus as recited in claim 12 wherein said filter comprises:

a glass screen positioned between a first and second stainless steel mesh, creating a sandwich arrangement;

first and second Teflon blocks encasing said sandwich arrangement, and each of said first and second Teflon blocks having centered bore holes allowing fluid flow through said first and second Teflon blocks.

14. A method of zero headspace extracting of organic compounds comprising the steps of:

(a) sampling said organic compound and placing said organic compound in a sampling container;

(b) pressurizing said sampling container inside a canister;

(c) rotating said canister and sampling container;

(d) pressurizing said sampling container; and

(e) filtering said organic compound into a second sampling container.

15. The method as recited in claim 14 wherein said canister is a pressure vessel having a top and a bottom and side walls, the top having an opening with a first connector having an upflow and downflow side affixed with the sidewalls having an opening with a second connector having an up flow and down flow side affixed and wherein said top is removably attached to said sidewalls creating a pressurized chamber in said container and said sampling container having a third connector connected to the upflow side of said first connector of said pressure vessel.

16. The method as recited in claim 15 wherein said step of pressurizing said sampling container further comprises a pressure line being connected to said second connector and a pressure fluid being introduced into said pressurized chamber.

17. The method as recited in claim 16 wherein said container further comprises a filter attached to said top by a fourth connector in contact with said downflow side of said first connector allowing fluid flow between said sampling container and said filter.

18. The method as recited in claim 17 wherein said filter comprises a glass screen positioned between a first and second stainless steel mesh, creating a sandwich arrangement, first and second Teflon blocks encasing said sandwich arrangement, and each of said first and second Teflon blocks having centered bore holes allowing fluid flow through said first and second Teflon blocks.

19. The method as recited in claim 18 wherein said step of pressurizing further comprises pressurizing said pressurized chamber until said organic compound is visible at said first connector.

20. The method as recited in claim 19 wherein said step of rotating said canister and sampling container further comprises placing said pressure vessel in a rotator and pressure being extracted for a 18 hours.

21. The method as recited in claim 20 wherein said step of pressurizing said sampling container further comprises reintroducing a pressurizing fluid into said pressurized chamber.

22. The method as recited in claim 21 wherein said step of filtering said organic compound into a second sampling container further comprises attaching a second sampling container to said filter at a fifth connector whereby when said pressurized fluid is reintroduced into said pressurized chamber said organic compound flows through said filter into said second sampling container.

23. The method as recited in claim 21 wherein said sampling container is a tedlar bag having said third connector on one end and a wide mouth opening with a threaded cap on the other end.

24. The method as recited in claim 23 wherein said container is a stainless steel canister having a top and a bottom, said top having a first connector having an upflow and down flow side affixed, and an opening at the bottom with a piston inserted and in contact with said sampling container.

25. The method as recited in claim 24 wherein said step of pressurizing said sampling container inside a canister further comprises tying a cord or string around said sampling container and operating said piston to cause it to compress said sampling container in a uniform manner until said organic compound is visible at said first connector.

26. The method as recited in claim 25 wherein said step of rotating said canister and sampling container further comprises placing said canister in a rotator 18 hours.

27. The method as recited in claim 26 wherein said canister further comprises a filter attached to said top by a fourth connector in contact with said

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downflow side of said first connector allowing fluid flow between said sampling container and said filter.

28. The method as recited in claim 27 wherein said filter comprises a glass screen positioned between a first and second stainless steel mesh, creating a sandwich arrangement, first and second Teflon blocks encasing said sandwich arrangement, and each of said first and second Teflon blocks having centered bore holes allowing fluid flow through said first and second Teflon blocks.

29. The method as recited in claim 28 wherein said step of filtering said organic compound into a second sampling container further comprises attaching a second sampling container to said filter at a fifth connector whereby when said piston compresses said sampling container said organic compound flows through said filter into said second sampling container.

30. The method as recited in claim 29 wherein said sampling container is a Teflon bottle.

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